U.S. ENVIRONMENTAL PROTECTION AGENCY FISCAL YEAR 2002 REVISED FINAL ANNUAL PLAN JUNE 2002

GOAL: CLEAN AIR

The air in every American community will be safe and healthy to breathe. In particular, children, the elderly, and people with respiratory ailments will be protected from health risks of breathing polluted air. Reducing air pollution will also protect the environment, resulting in many benefits, such as restoring life in damaged ecosystems and reducing health risks to those whose subsistence depends directly on those ecosystems.

OBJECTIVE: ATTAIN NAAQS

Reduce the risk to human health and the environment by protecting and improving air quality so that air throughout the country meets national clean air standards by 2005 for carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead; by 2012 for ozone; and by 2018 for particulate matter (PM). To accomplish this in Indian country, the tribes and EPA will, by 2005, have developed the infrastructure and skills to assess, understand, and control air quality and protect Native Americans and others from unacceptable risks to their health, environment, and cultural uses of natural resources.

Annual Performance Goals and Measures

Reduce Ozone and Ozone Precursors

In 2002

Maintain healty air quality for 41.7 million people living in monitored areas attaining the ozone standard; certify 10 areas of the remaining 55 nonattainment areas have attained the 1-hour NAAQS for ozone, thus increasing the number of people living in areas with healthy air by 2.5 million.

| Performance Measures: | FY 2002 Enacted | Units |
|--|--------------------|--------|
| Total Number of People who Live in Areas Designated to Attainment of the Clean Air Standards for Ozone | 44,146,000 | People |
| Additional People Living in Newly Designated Areas with Demonstrated Attainment of the Ozone Standard | 2,467,000 | People |
| VOCs Reduced from Mobile Sources | 1,755,000 | Tons |
| NOx Reduced from Mobile Sources | 1,319,000 | Tons |

Baseline:

Performance Baseline: As a result of the Clean Air Act Amendments of 1990, 101 areas with a population of 140,015,000 were designated nonattainment for the 1-hour standard. Through 2000, 44 areas with a population of 35.1 million have been redesignated to attainment and 57 areas remain in nonattainment. The 1995 baseline for VOCs reduced from mobile sources is 8,134,000 tons and 11,998,000 tons for NOx, both ozone precursors.

Reduce Particulate Matter

In 2002 Maintain healthy air quality for 3.4 million people living in monitored areas attaining the PM standards; increase by 3.7 million the number of people living in areas with healthy air quality that have newly attained the standard.

| Performance Measures: | FY 2002 | |
|--|--------------------------|-----------------|
| Total Number of People who Live in Areas Designated in Attainment with Clean Air Standards for PM | Enacted 7,181,000 | Units People |
| Additional People Living in Newly Designated Areas with Demonstrated Attainment of the PM Standard | 3,743,000 | People |
| PM-10 Reduced from Mobile Sources | 23,000 | Tons |
| PM-2.5 Reduced from Mobile Sources | 17,250 | Tons |

Baseline:

Performance Baseline: As a result of the Clean Air Act Amendments of 1990, 84 areas with a population of 31,114,000 were designated non-attainment for the PM-10 standard. Through 2000, 9 areas with a population of 1.3 million have been redesignated to attainment. The 1995 baseline for PM-10 reduced from mobile sources is 880,000 tons and 659,000 for PM-2.5.

Reduce CO, SO2, NO2, Lead

In 2002

Maintain healthy air quality for 36.7 million people living in monitored areas attaining the CO, SO2, NO2, and Lead standards; increase by 16 million, the number of people living in areas with healthy air quality that have newly attained the standard.

| Performance Measures: | FY 2002 Enacted | Units |
|---|--------------------|--------|
| Total Number of People Living in Areas Designated in Attainment with Clean Air Standards for CO, SO2, NO2, and Pb | 52,725,000 | People |
| Additional People Living in Newly Designated Areas with Demonstrated Attainment of the CO, SO2, NO2, and Pb Standards | 16,005,000 | People |
| CO Reduced from Mobile Sources | 11,002,000 | Tons |
| Total Number of People Living in Areas with Demonstrated Attainment of the NO2 Standard | 14,944,000 | People |

Baseline:

Performance Baseline: For SO2, Lead and CO, 107 areas with a population of 65,573,000 were classified as non-attainment or were unclassified in 1990. Through 2000, 56 of those areas with a population of 31.1 million have been redesignated to attainment. The 1995 baseline for mobile source emissions for CO was 70,947,000 tons.

Research

PM Effects Research

In 2002

Provide data on the health effects and exposure to particulate matter (PM) and provide methods for assessing the exposure and toxicity of PM in healthy and potentially susceptible subpopulations to strengthen the scientific basis for reassessment of the NAAQS for PM.

| Performance Measures: | FY 2002 | |
|---|---------|--------|
| | Enacted | Units |
| Report on the effects of concentrated ambient PM on humans and animals believed most susceptible to adverse effects (e.g., elderly, people with lung disease, or animal models of such diseases). | 1 | report |
| Report on animal and clinical toxicology studies using Utah Valley particulate matter (UVPM) to describe biological mechanisms that may underlie the reported epidemiological effects of UVPM. | 1 | report |

Baseline:

At present, there is substantial evidence from epidemiological studies that increased levels of PM are associated with increased frequency of death and disease, especially in the elderly and in individuals with cardiopulmonary disease. Children also have been shown to have increased illness as PM levels increase. Our understanding of the biological mechanisms underlying these associations, of the identification of components (e.g., organics, metals) or characteristics (e.g., size) of PM producing these effects, and of human exposures to the most important components of PM is only now beginning to emerge. As noted by the National Research Council, the EPA research program is well targeted to address these critical knowledge gaps and is well integrated with the extensive ambient air monitoring programs managed by State and local agencies. The results of the research efforts in 2002 will include development and application of new methods for assessing human exposure and testing of toxicity mechanisms that will yield an improved scientific basis for setting National Ambient Air Quality Standards for PM.

OBJECTIVE: REDUCE AIR TOXICS RISK

By 2020, eliminate unacceptable risks of cancer and other significant health problems from air toxic emissions for at least 95 percent of the population, with particular attention to children and other sensitive subpopulations, and substantially reduce or eliminate adverse effects on our natural environment. By 2010, the tribes and EPA will have the information and tools to characterize and assess trends in air toxics in Indian country.

Annual Performance Goals and Measures

Reduce Air Toxic Emissions

In 2002

Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 5% from 2001 (for a cumulative reduction of 40% from the 1993 level of 4.3 million tons per year.)

Performance Measures: FY 2002 Enacted

Combined Stationary and Mobile Source Reductions in Air Toxics Emissions

Enacted
Units
Percent

Baseline: In 1993, the last year before the MACT standards and mobile source regulations developed under the Clean Air Act were implemented,

stationary and mobile sources emitted 4.3 million tons of air toxics. Air toxics emission data are revised every three years to generate inventories for the National Toxics Inventory. Reductions are estimated from regulatory controls in the years between the three year

updates.

OBJECTIVE: REDUCE ACID RAIN.

By 2005, reduce ambient nitrates and total nitrogen deposition to 1990 levels. By 2010, reduce ambient sulfates and total sulfur deposition by up to 30 percent from 1990 levels.

Annual Performance Goals and Measures

Reduce SO2 Emissions

In 2002 Maintain or increase annual SO2 emission reduction of approximately 5 million tons from the 1980 baseline. Keep annual emissions below level authorized by allowance holdings and make progress towards achievement of Year 2010 SO2 emissions cap for utilities.

Performance Measures: FY 2002
Enacted Units

SO2 Emissions 5,000,000 Tons Reduced

Baseline: Performance Baseline: The base of comparison for assessing progress on the annual performance goal is the 1980 emissions baseline. The

1980 SO2 emissions inventory totals 17.5 million tons for electric utility sources. This inventory was developed by National Acid Precipitation Assessment Program (NAPAP) and used as the basis for reductions in Title IV of the Clean Air Act Amendments. This data is also contained in EPA's National Air Pollutant Emissions Trends Report. Statutory SO2 emissions cap for year 2010 and later is at 8.95 million tons below 1980 emissions level. "Allowable SO2 emission level" consists of allowance allocations granted to sources each year

under several provisions of the Act and additional allowances carried over, or banked, from previous years.

Reduce NOx Emissions

In 2002 2 million tons of NOx from coal-fired utility sources will be reduced from levels that would have been emitted without implementation of

Title IV of the Clean Air Act Amendments.

Performance Measures: FY 2002

NOx Reductions Enacted Units
2,000,000 Tons Reduced

Baseline: Performance Baseline: The base of comparison for assessing progress on this annual performance goal is emissions that would have

occurred in the absence of Title IV of the Clean Air Act Amendments. These emissions levels are calculated using actual annual heat input and the baseline (uncontrolled) NOx emission rates by boiler type from the preamble to the final rule (61 FR 67112, December 19, 1996).